# THE CLEAN ENVIRONMENT COMMISSION

Manitoba
Environment

MG 912

# REPORT ON PUBLIC HEARINGS
# CHARLESWOOD BRIDGE PROJECT

THE MANITOBA CLEAN ENVIRONMENT COMMISSION
JUNE, 1992

92-07154/

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# PREFACE

This document contains a selected summation of the evidence presented at the public hearings convened by the Manitoba Clean Environment Commission to review the matter which is the subject of this report.

A detailed account of the evidence presented before the Commission is contained in the Verbatim Transcript of the hearing, which is available for review at designated Public Registry locations. A list of hearing participants along with a list of Exhibits filed at the hearing, has been included in this report as Appendix "A" and Appendix "B", respectively.

## THE CLEAN ENVIRONMENT COMMISSION

Under *The Environment Act* (1988), the Clean Environment Commission provides a process for the public to participate in environmental decision making process in Manitoba. The Commission also provides the Environment Minister with advice and recommendations on environmental issues and on environmental licensing matters.

Commission membership includes a full-time Chairperson and a maximum of 10 part-time commissioners appointed by Order in Council. Members come from a wide variety of occupations and reside in different areas of Manitoba.

## THE PUBLIC HEARING PROCESS

Public participation in Manitoba's environmental decision-making process has been facilitated by Clean Environment Commission hearings since the establishment of *The Clean Environment Act* in 1968. This basic role and responsibility of "developing and maintaining public participation in environmental matters" continues under *The Environment Act* of 1988. The primary mechanism used in achieving this has been public hearings.

In order to facilitate and encourage public participation, the Commission has tailored procedures to accomplish this goal. Hearings are held in the community where the development under consideration is located, as well as in other centres where interest is high or where environmental impact is sufficient to provide an interest for individuals or environmental groups located elsewhere.

The Commission strives to ensure that the evidence and opinions of all presenters is treated fairly and with due respect and consideration.

## CHARLESWOOD BRIDGE PROJECT

### BACKGROUND

On March 9, 1990, The City of Winnipeg filed a proposal for licensing under *The Manitoba Environment Act* to construct a bridge, known as the Charleswood Bridge, across the Assiniboine River between the communities of St. James and Charleswood (Figure 1).

In a letter dated November 14, 1989, the Minister of Environment, the Honourable Glen Cummings requested that the Clean Environment Commission hold a hearing to receive public representations on the proposed Charleswood Bridge and provide him with a report and recommendations.

A public hearing was convened by the Commission on July 30th & 31st, October 29th & 30th, and November 4th, 5th and 6th, 1991.

Commissioners in attendance at the hearing included: Mr. Jim Donald, Q.C., Chairperson, Ms. Linda Ericsson, Ms. Betty Pawlicki and Mr. Arnie Barr.

The City of Winnipeg was represented at the hearing by members of their Law Department and the Streets and Transportation Department. The Environmental Impact Assessment (EIA) had been prepared on behalf of The City of Winnipeg by MacPlan Environmental Services Ltd. and a team of specialists coordinated by MacPlan. A number of St. James neighborhood groups were represented at the hearing by legal counsel with all other presenters speaking on their own behalf or on behalf of a governmental organization, business or association.

### MINISTERIAL INSTRUCTIONS

A letter from the Minister of the Environmental requested that the Commission's recommendations deal with the adequacy of the City's environmental assessment. There was a further note in the instructions received from the Minister stating that traffic arteries are a recognized acceptable land use in an urban environment.

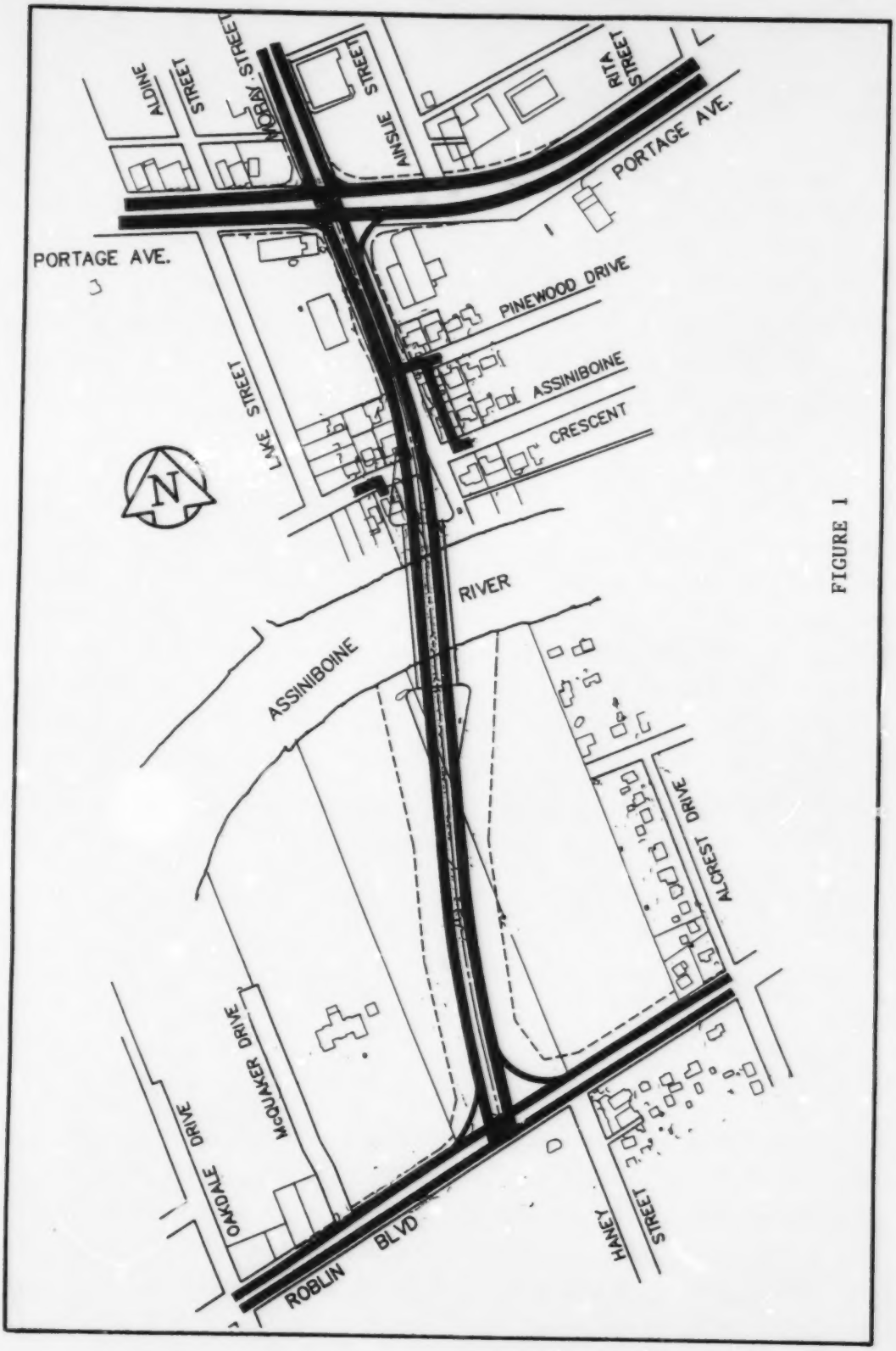
ALDINE STREET
MOODY STREET
AINSLIE STREET
RITA STREET
PORTAGE AVE.
PORTAGE AVE.
PINEWOOD DRIVE
ASSINIBOINE CRESCENT
LAKE STREET
N
RIVER
ASSINIBOINE
ALCREST DRIVE
OAKDALE DRIVE
McQUAKER DRIVE
ROBLIN BLVD
HANEY STREET

FIGURE 1

## CHALLENGE TO THE PROCESS

Legal Counsel, acting on behalf of a number of St. James neighborhood groups, presented a motion that the EIA was defective because of its narrowness of scope. The groups contended that the EIA failed to consider the impacts of bridge traffic on the area north of Portage Avenue on Moray Street. There was also a challenge that the City had failed to follow the *Guidelines* issued by Manitoba Environment in the preparation of the EIA. As an example, it was questioned whether the criteria used to select the proposed bridge location were listed in the EIA, as required, and whether explanations were provided as to why alternate bridge sites were not considered.

In response to the challenge The City's representative drew attention to a chronology of events that had taken place leading up to correspondence from Manitoba Environment specifying that the EIA satisfactorily fulfilled the requirements as set out in the *Guidelines*. Comments had been received from the community prior to the issuance of *Final Guidelines*. In summation, the City representative noted that in any study, boundaries had to be set, and in this instance the specification was that the study area be confined between Roblin Boulevard and Portage Avenue.

After consideration of the arguments presented before them, The Commission ruled that the hearing would proceed, and that the *Final Guidelines* , as issued, would be followed. On a related question of property devaluation and tax assessments on residential property, the Commission determined that these matters were also outside the scope of the review outlined in the *Final Guidelines*.

## CITY OF WINNIPEG

### OVERVIEW

The City's representatives pointed out that the need for the project proceeded from "Plan Winnipeg". The "Plan" identified the need to develop public transportation networks that would convey suburbanites to the downtown area while relying on private automobile use for trips across town. It was explained that river crossings were an essential component of this transportation plan. The recently completed Kildonan Bridge, and the proposed Charleswood Bridge, were identified in "Plan Winnipeg", to support this concept.

The City indicated that a number of bridge alignments between the St. James and West Perimeter Bridges had been examined over the past 45 years. A prime candidate site had been the alignment from the Charleswood Golf Course at Roblin Boulevard to Moray Street in St. James. As part of a future bridge development, the City purchased the Charleswood Golf Course in 1968. With the commencement of "Plan Winnipeg" in 1978, the Moray Street location was chosen as it involved the least amount of property acquisition, community disruption was minimized and a crossing midway between the St. James and West Perimeter Bridges could be facilitated.

A bridge concept study prepared by D.S. Lea Consultants was completed in May, 1988. City Council approved capital estimates in March, 1989 which included funds for an engineering design and property acquisition for a bridge project at Moray Street.

## PROJECT DESCRIPTION

The bridge project, as proposed, would consist of twin, 2 lane structures with an extension to Roblin Boulevard and Portage Avenue consisting of a 4 lane divided highway. There would be a new intersection at Roblin Boulevard west of Haney Street. Portage Avenue would be widened in the vicinity of the Moray Street intersection.

The traffic volume anticipated on opening day was expected to reach 27,500 vehicles with the number of vehicles increasing to 33,600 by the year 2007. The estimates of vehicle counts were based on information produced through the "Plan Winnipeg" process.

## ENVIRONMENTAL IMPACT ASSESSMENT

The Consultant reiterated that the EIA considered only the direct impacts of the project as outlined by the study *Guidelines*. Clarification had been received from the Environment Department that the need for alternatives to the project, potential impacts on property values and the potential impacts arising from alterations to existing streets were outside of the scope of the study.

Since this was the first urban EIA performed under *The Manitoba Environment Act*, consideration had been given to other such reviews conducted at locations in Ontario and the United States.

An explanation was provided as to the need to vary the geographical boundaries of a number of components of the study. Study sectors such as noise, vibration, safety, and impacts on vegetation were confined to the Roblin Boulevard - Portage Avenue area. Topics such as air, soil and water quality covered a larger sector because of their nature. A number of socio-economic evaluations extended into the larger community beyond the vicinity of the bridge. For example,the accidental release of hazardous material was seen as an issued best addressed on a City wide basis.

## VEGETATION

Surveys revealed the presence of a small stand of elm, oak, maple and willow along the right-of-way on the north bank of the river. The principal species on a 2.5 ha tract on the south side of the river were oak and aspen with a grove of ash, elm and linden on the river bank. Rare plants were not found in the area. It was indicated that mitigation measures would take the form of limiting the clearing to that necessary, and re-vegetating exposed areas.

## WILDLIFE

Wildlife habitat loss was described as small relative to that available in adjacent property south of the river. An increased deer vehicle collision rate was expected, and mitigation was proposed that would focus on measures to reduce these collisions.

## WATER QUALITY

City representatives suggested that impacts on Assiniboine River water quality during construction would be associated with increases in the suspended sediment load. The utilization of proper construction methods, and adherence to the provisions of the Manitoba Department of Fisheries, *"Recommended Fish Procedures for Fish Crossings in Manitoba"*, were proposed as an effective means of mitigating the impacts of the increased sediment load. One such mitigation would be the construction of the bridge piers during the winter. A further mitigation would be to protect the slopes through the use of landscaping or the use of riprap.

It was indicated that once the bridge is operational, the greatest potential water quality concern was a hazardous material spill. As this is a problem common to the entire network of roads within Winnipeg, the City's representatives suggested that it would be dealt with at the bridge site as elsewhere in the City.

In their evaluation of the EIA, a Federal Fisheries representative suggested that an investigation of measures to improve fish spawning at locations adjoining the bridge piers should be explored with the Manitoba Department of Fisheries.

## AIR QUALITY

According to the *Manitoba Air Quality Objectives*, overall air quality in Winnipeg is acceptable, with only occasional exceedences of ozone and particulate matter. In terms of the proposed bridge, it was suggested that dust control measures would be necessary during construction. Local but moderate increases in vehicle exhaust emissions in the vicinity of the bridge were expected.

## SOIL QUALITY

In order to obtain appropriate background material and data, soils were sampled at representative sites on Moray Street from Ness Avenue to the Assiniboine River and along the bridge right-of-way to Roblin Boulevard. It is expected that deposition of contaminants in soils will be equivalent to similar streets in the City.

## HERITAGE RESOURCES

Investigations at the site of the proposed bridge did not indicate the presence of any significant historic resources. It was explained that experts in historical resources would undertake a further archaeological review during the construction of a feeder watermain proposed for a site east of the bridge. In the event that heritage resource material was recovered at this stage, archaeological monitoring would continue during the bridge construction.

## NOISE/VIBRATION

It was indicated that the *City of Winnipeg's Motor Vehicle Noise Policies and Guidelines* had been followed during the assembling of the bridge project proposal. Projections indicate that noise shall be less than 65 dBA Ldn in the outdoor recreational area of a residential property closest to the roadway and at a height of 1.2 meters. Noise levels in the vicinity of the bridge were measured currently at 53-60 dBA Ldn. Modelling has shown that noise guidelines will be exceeded in some locations between Portage Avenue and the Assiniboine River. It was proposed that noise walls would

be used at these locations to reduce predicted noise levels to limits less than those stipulated in the *Policy*.

There were no formal studies concerning vibration undertaken in the study area. It was conceded that there is a possibility of vibration in specific buildings in the immediate vicinity of the bridge and approach roads. Assurance was given that complaints would be dealt with on an individual basis similar to elsewhere in the City. There was a later reference to truck traffic being associated with vibration and that winter conditions might be more conducive to vibrations.

## TRAFFIC SAFETY

The focus for traffic safety matters was centered on the intersection at Portage Avenue and Moray Street and Roblin Boulevard and Moray Street. As a result of the creation of these intersections, and by virtue of the increased traffic flow in the area, increases in the total number of motor vehicle accidents were predicted. A low incidence of pedestrian/vehicle collisions are expected at the 2 intersections.

## SOCIO ECONOMICS

Under *The Environment Act*, Environmental Impact Assessments (EIA) must take into account socio-economic impacts of a project.

It was acknowledged that the proposed bridge project would have some impacts on commercial land uses. There would, for example, be an inconvenience to adjacent businesses at Moray and Portage during intersection modification. Some of the adjacent commercial property would have to be acquired, and there would be some limited access changes to a number of the commercial enterprises.

From 6 to 9 residential properties would be required to accommodate the bridge and roadways. There would also be some access changes to residences on Assiniboine Crescent and Pinewood Drive. Green space in the area would also be lessened by the physical structure.

In addition to pedestrian walkways on the bridge and roadways, walking and bicycle paths beneath the bridge near the river edge would be provided. A barrier would be constructed to separate vehicular and pedestrian traffic on the bridge.

Surveys of both the total community and the community immediately adjacent to the bridge project were undertaken. It was reported that respondents felt that the bridge crossing would provide economic benefits, since businesses on either side of the river would have more ready access to customers on the opposite side of the river. Accessibility for emergency vehicles would also be enhanced. It was generally felt that because of the creation of busy intersections at both Portage and Moray and Roblin and Moray, appropriate requirements should be taken to protect the safety of school children.

The telephone consultation of the community as a whole indicated that 84% of residents perceived that the bridge would be beneficial. Of those surveyed close to the bridge, 75% stated that at the completion of the project, there would be problems for the community and a deterioration of the quality of life.

## INDIVIDUAL AND GROUP PRESENTATIONS

Mr. A. Jeffrey and Mr. G. Nicholas spoke on behalf of Keep Charleswood Green, a group who have concerns about the Charleswood Bridge project as proposed. Both spokespersons questioned the handling of the project proposal from the outset. They alleged that The City of Winnipeg were unresponsive to requests for information needed by the residents in their attempts to provide a defence against the proposed bridge. The presenters went on to advise that throughout the years, at a variety of forums, Charleswood residents represented by Keep Charleswood Green had indicated their support for a simple two lane bridge connecting Roblin Blvd. to Portage Avenue.

In the event that the bridge project proceeded, the delegation from Keep Charleswood Green were interested in assuring that the changes in traffic dynamics and increased traffic in the residential area south of the bridge would not adversely affect the level of safety currently experienced by pedestrians in the area. The safety of children on their way to and from school was of particular concern to the residents.

Mrs. A. Chapman, a resident whose home is located at the corner of Assiniboine Crescent and Lake Street (immediately west of the project area) identified that the bridge as originally conceived was to be two lanes. Since the bridge project, now enlarged in scope and size, was going to result in an increase in both noise and pollutants at her location, she expressed an interest in the City acquiring her property.

Mr. G. Nordman, a businessman operating out of locations in both Charleswood and St. James, and with a residence in Charleswood, pointed out the importance to the business community of having in place the Charleswood Bridge, as proposed. He suggested that the bridge would provide an additional river crossing between St. James and Charleswood and serve as an important link between the two communities.

Mr. Nordman also spoke as a representative of the St. James Chamber of Commerce. He indicated that in the view of the Chamber members, the assessments contained in the D. S. Lea report and the report submitted by MacPlan, contained appropriate recommendations for monitoring and mitigation of environmental impacts associated with the construction of the bridge. He also indicated that the Chamber was satisfied that sufficient measures had been taken to ensure that the public were given opportunities to review the assessments prepared on the proposal.

Mr. B. McLeod, a resident located south of Roblin Blvd. in the vicinity of the proposed bridge spoke in opposition to the proposal on behalf of a number of residents from Bachelor Avenue and Laxdal Road in Charleswood. He indicated that their principal concern was related to the increased amount of traffic that would be funnelled through residential areas in Charleswood once the bridge was operational.

Mr. D. Logan, a resident and businessman from St. James spoke of the importance of the bridge as a link between the two communities.

Mr. K. Emberley, a resident of St. James, spoke in opposition to the bridge project. He raised the issue of measures required to relieve traffic congestion at the Portage Avenue and Moray Street intersection.

Mr. S. Gauld, a St, James resident from a location in reasonable proximity to the bridge project testified that the proposed bridge was a necessary link between an older population in St. James and a younger population in Charleswood.

Mr. J. Chesin, a resident of St. James whose residence is in close proximity to the proposed bridge, objected to the increase in traffic noise that would be experienced as a result of the opening of the bridge.

Ms J. Hillard, a representative from the Manitoba Environmental Council, expressed concern with the inadequacy of the Environmental Impact Assessment (EIA), as submitted by The City of Winnipeg. She indicated, in particular, Council's disappointment with the extent to which alternatives to the project were explored in the document.. She suggested that improvements to transit systems and the park and ride concept should have been considered in the proposal assessment. It was felt that these types of improvements would possibly lessen the need for private automobile as a means of transportation, and subsequently the need for new road and bridge projects. The Council representative also expressed concern over the destruction of vegetation during bridge construction. In addition, the representative expressed reservations about the adequacy of the flora and fauna surveys undertaken by the consulting team on behalf of the project proponent.

Dr. K. Wrogemann, a resident of Pinewood Drive at a location close to the proposed bridge, identified that he had never opposed the concept of a community bridge across the river consisting of two lanes, but objected to the current design as proposed. He discussed the history of the project and pointed out where he felt decisions made by or on behalf of The City of Winnipeg in connection with the Charleswood Bridge project were flawed.

Ms. E. Warkentin, a member of a citizen's group, Consider St. James (COST), made a presentation on behalf of the group. She indicated that many COST members own residences that are located along Moray Street, north of Portage Avenue. Ms Warkentin testified that the principal concern of the group related to the impact on the community of a large increase in vehicle traffic in the area. She indicated that on a number of occasions the COST group had attempted to have the EIA "Guidelines" expanded to consider property devaluation. Another concern noted by the group was that the project, as proposed, was designed to facilitate future expansion to accommodate even greater amounts of traffic than those currently projected. The spokesperson documented in detail the history of river crossing projects designed to link the communities of St. James and Charleswood, and the opposition to these various plans. Ms Warkentin's presentation was supported by exhibits from a former City of Winnipeg Planner, Commissioner, and two Councillors.

Mr. and Mrs. M. Balshaw, who had moved to Assiniboine Crescent (in the vicinity of the proposed bridge) from Toronto, Ontario, a number of years previously, pointed out that in their view the bridge project was simply too big and that the funds for it could be better spent on other projects. It was their opinion that a small bridge in the area would provide the necessary convenience for the two communities without the severe impacts associated with the current large scale bridge proposal under

consideration. Mr. Balshaw suggested that in the long run, greater funds would have to be allocated to mitigation of impacts if the bridge were constructed as proposed.

Mr. R. Cunningham, an area resident, made a presentation which included a detailed plan on measures that would improve the conveyance of traffic on Metro Route # 90, thus obviating the need for another river crossing between St. James and Charleswood, as was currently under consideration.

## MANITOBA ENVIRONMENT

Mr. Dan McNaughton, representing Manitoba Environment, outlined the role of the Department in administering the environmental assessment process for the proposed bridge. He indicated that the Department was satisfied that the information submitted by the proponent, The City of Winnipeg, was complete and of sufficient quality to enable the Commission to make recommendations on the proposal. A review of the Department's involvement in the project was presented which included reference to a letter from the Director of Approvals to the Commission, dated May 21, 1991, advising that the environmental impact assessment of the proposed Charleswood Bridge, as submitted by The City of Winnipeg, fulfilled the requirements set out in the final guidelines provided to the City by Manitoba Environment. He indicated further that the guidelines for the preparation of an environmental impact assessment of the project had been subject to public review prior to their issuance as Final Guidelines in June of 1990.

Mr. McNaughton entered documentation into evidence that indicated that the project had been reviewed under the Federal Government's environmental assessment and review process and that it had been determined that a federal review was not necessary.

The representative of Manitoba was thoroughly questioned, particularly with respect to the development of the EIA Guidelines for the project.

## FINAL ARGUMENTS

Closing arguments were submitted by both The City of Winnipeg and the COST Study Group. These submissions were a reiteration of the points made during presentations and through questioning during the hearing process.

## SUMMARY AND DISCUSSION

The Commission hearings reviewing The City of Winnipeg - Charleswood Bridge Project proposal were lengthy and at times highly argumentative in nature. A great deal of emotion surrounded the discussions.

An Assiniboine River crossing in the area has been under consideration by Municipal governments for more than 40 years. Moray street in St. James connecting with the Charleswood Golf Course on the south side of the river has been the prime candidate site for many years. As a result of the existing rights-of-way, and land that the City has purchased over the years, a limited amount of property would be acquired by the City to facilitate the river crossing and connecting roadways at Moray Street.

The production of noise from vehicular traffic on the bridge and its impact on adjacent residential property results in some difficulty in the neighborhood. Reasonable noise limits are those that meet the requirements of the *City of Winnipeg's Motor Vehicle Noise Policy and Guidelines*. The proponent proposes to alleviate noise by means of appropriately located noise walls to meet the noise policy.

In the case of substantial projects, the provincial Environment Department develops *Guidelines* for the guidance of the proponent in the preparation of an Environmental Impact Assessment. In the matter of the Charleswood Bridge project, *Guidelines* for the conduct of the EIA were prepared by an inter-departmental technical advisory committee headed by a representative of the Environment Department. The *Guidelines* were posted in the Provincial Registry for comment. Comments were received and adjustments were made subsequent to the preparation of the *Final EIA Guidelines*. These *Final Guidelines* were not appealed to the Minister of Environment.

Residents of a number of St. James neighborhoods Associations, which had been formed some years previously due to concerns for the bridge at the Moray Street location, were represented at the hearing by legal counsel. From the outset of the hearing and throughout, counsel challenged the adequacy of the *Guidelines* on which the EIA was based. These *Guidelines* instructed that "the assessment will consider the portion of the Charleswood Bridge proposal which involves development at the new location". Counsel felt that the area north of Portage Avenue should have been included in the assessment since improvements and changes were to be made to sections of Moray Street. Residents south of Roblin Blvd., in the vicinity of the proposed bridge, felt that this section should also have been included in the assessment. The Commission listened to the positions expressed on both sides of the question and ruled that these matters were outside of the purview of the hearing respecting the application before them. The question of property devaluation and tax relief in subsequent debate were also ruled outside the parameters of the guidelines and hence the Commission's review process.

It became obvious from the outset of the hearings that residents in areas adjacent to the bridge project on both sides of the river had serious reservations about the bridge project as conceived. Some expressed disapproval for any sort of bridge crossing at the site, while others felt that a smaller two lane bridge would be acceptable. Although the Commission had ruled on the adequacy of the *Guidelines* and the Environmental Impact Assessment, much of the evidence presented at the hearing dealt with the area outside of the boundaries of the assessment.

## CONCLUSION

The hearing process revealed to the Commission a significant level of public concern with respect to the study area addressed in the Environmental Impact Assessment. The Commission recognized that this area was defined by the project specific *Guidelines* issued by the Environment Department, and that these *Guidelines* and the study area they outlined were appealable to the Environment Minister. However, the Commission is concerned that the process for review and appeal of the *Guidelines* may not have been clearly understood by the public. As a result, a significant number of participants remained dissatisfied with the scope of the review process and with the contents of the Environmental Impact Assessment (EIA).

In terms of the project proposal, as outlined in the EIA, the Commission is satisfied that the mitigation measures described will adequately safeguard the environment and minimize adverse impacts. The monitoring programs described in the documents appear complete, and should identify additional measures required to respond to any unidentified impacts.

## RECOMMENDATIONS

The Commission recommends that the Charleswood Bridge Project, as described in the February 1991 proposal submitted by The City of Winnipeg, be licensed under *The Environment Act* with the following conditions:

(1) Noise walls shall be constructed as described in the EIA that will both satisfy the *City of Winnipeg's Motor Vehicle Noise Policies and Guidelines*, and at the same time permit both vehicular and pedestrian access in the nearby residential area while preserving the aesthetics of the area to the maximum degree possible.

(2) Pedestrian safety measures shall be undertaken particularly for the protection of children who travel adjacent to the proposed new intersection at Roblin Blvd. and Moray Street extension, and Portage Avenue and Moray Street.

(3) During construction of the bridge and roadway, efforts will be expended to inconvenience residents in the area as little as possible mainly from the perspective of access to their properties, but also as a result of dust and noise.

(4) During construction of the bridge, measures will be undertaken to ensure that run-off containing suspended soil particles being discharged to the river be minimized to the extent possible. Adherence to the "Recommended Fish Protection Procedures for Stream Crossings in Manitoba" shall be mandatory.

(5) Removal of vegetation from the bridge site during construction will be minimized as much as possible and following construction the area shall be landscaped to both restore and enhance the area and to protect against erosion.

(6) Wildlife specialists shall be retained to ensure that measures are taken that will minimize the possibility of vehicle related deer kill as a result of the bridge and roadway.

(7) Fisheries specialists shall be retained to ensure the correct establishment of fish spawning areas adjacent to the bridge piers.

(8) During the construction of the feeder watermain east of the bridge project, an archaeologist should be present on site to recover any archaeological material which is encountered and to record soil strata. If there is evidence recovered at this stage, the program shall be continued throughout the excavation stages of the bridge construction.

(9) On-going monitoring shall be undertaken by The City of Winnipeg on matters such as traffic, pedestrian safety, vehicle related deer kills, fish spawning, and noise. Results of these monitoring programs shall be reported to the Department on an annual basis.

## APPENDIX A: LIST OF PARTICIPANTS

Mr. John R. Allen
Winnipeg, MB

Mr. Peter Ashton
Winnipeg, MB

Barbara & Michael Balshaw
Winnipeg, MB

Mr. Christopher Blair
Winnipeg, MB

Mr. Ed Bloomer
Winnipeg, MB

Ms. Judith Bouchard
Winnipeg, MB

Mr. Bryan Blunt
Winnipeg, MB

Mr. Archie Brawlry
Winnipeg, MB

Mr. Garry Buechler
Winnipeg, MB

K. Buhr
Winnipeg, MB

Mr. R.L. Carter
Winnipeg, MB

J. & Anne Chapman
Winnipeg, MB

Mr. John Chesin
Winnipeg, MB

Mr. R.D. Chown
Pinefalls, MB

Mr. David W. Collins
Winnipeg, MB

Mr. L.K. Collins
Winnipeg, MB

Mr. F.W. Corey
Vermette, MB

Ms. D. Crossin
Winnipeg, MB

R.W. & Irene Cunningham
Winnipeg, MB

Mr. Kerry Dangerfield
Winnipeg, MB

Mr. R. Douglas
Winnipeg, MB

Doug & Nancy Dykstra
Winnipeg, MB

Mr. Ken Emberley
Winnipeg, MB

Mr. James Farquharson
Calgary, Alberta

Mr. L. Finkle
Winnipeg, MB

Mr. C. Fosh
Winnipeg, MB

Mr. R.R. Foster
Winnipeg, MB

W. French
Winnipeg, MB

Mr. Stuart Gauld
Winnipeg, MB

B.J. Harris
Winnipeg, MB

G.W. Hewitt
Winnipeg, MB

Ms. D. Hicks
Winnipeg, MB

Ms. Elisabeth Hicks
Winnipeg, MB

Ms. Jenny Hillard
Winnipeg, MB

M.L. Hnydiuk
Winnipeg, MB

Mr. Wayne Hnydiuk
Winnipeg, MB

Mr. Allan Jeffrey
Winnipeg, MB

H. Johnson
Winnipeg, MB

D. Kagan
Winnipeg, MB

V.T. Keenan
Pine Falls, MB

Mr. David Kilgour
Winnipeg, MB

Ms. Janet Kinley
Winnipeg, MB

Ramon Kopas
Winnipeg, MB

Ms. Diane Kunec
Winnipeg, MB

D.R. Kupskay
Winnipeg, MB

Mr. Don Logan
Winnipeg, MB

Mr. A. Lyons
Winnipeg, MB

Ms. Marg MacFarlane
Winnipeg, MB

Ms. Barbara MacKay
Winnipeg, MB

Ms. Ruth Marr
Winnipeg, MB

Mr. Warren McCulloch
Winnipeg, MB

Mr. Dale McDermid
Winnipeg, MB

Mr. W.G. McFetridge
Winnipeg, MB

Mr. B. McKean
Winnipeg, MB

Mr. Brian McLeod
Winnipeg, MB

Mr. Dan McNaughton
Winnipeg, MB

Mr. Wayne Neily
Winnipeg, MB

Mr. George Nelson
Winnipeg, MB

Mr. Glen Nicholas
Winnipeg, MB

Mr. Grant Nordman
Winnipeg, MB

T. Nowicki
Winnipeg, MB

James & Judy Oborne
Winnipeg, MB

Mr. A. Oliver
Winnipeg, MB

G.J. Orle
Winnipeg, MB

C. Osler
Winnipeg, MB

Mr. Brian Pannell
Winnipeg, MB

Mr. Richard Patching
Calgary, Alberta

Mr. Harold Peacock
Pine Falls, MB

Mr. Stew Pierce
Winnipeg, MB

Kim Raban
Winnipeg, MB

J. Ritchot
Winnipeg, MB

Mr. Kenn Rosin
Winnipeg, MB

Ms. Sandra G. Russell
Winnipeg, MB

Mr. Marvin Samphir
Winnipeg, MB

G.A. Sandell
Winnipeg, MB

Mr. Garry Schaefer
Winnipeg, MB

Ms. Linda Sherrin
Winnipeg, MB

L. Skirten
Winnipeg, MB

T.G. Smith
Winnipeg, MB

Ms. Susie Strachan
Winnipeg, MB

Mr. John Steele
Winnipeg, MB

Ms. Janice Taylor
Winnipeg, MB

Mr. Richard Tebinka
Winnipeg, MB

R.H. Tottle
Winnipeg, MB

Mr. Tony van der Vooren
Winnipeg, MB

E. Warkentin
Winnipeg, MB

Mr. C. Wilberforce
Winnipeg, MB

Mr. W.E. Wilberforce
Winnipeg, MB

K. & Mark Wrogemann
Winnipeg, MB

Mr. Fred Zeggil
Winnipeg, MB

## APPENDIX B: LIST OF EXHIBITS

1. Letter dated July 29, 1991, from Brian Pannell representing the Cost Study Group and the Birchwood Neighbourhood Study Group of St. James - Assiniboine to The Clean Environment Commission.

2. Written Presentation of The City of Winnipeg "Outline - Charleswood Bridge Project".

3. Letter dated November 14, 1989, from Honourable J. Glen Cummings, Minister of Environment, to Mr. Stan Eagleton, Chair, Clean Environment Commission.

4. Final Guidelines for the Preparation of an Environmental Impact Assessment for the Proposed Charleswood Bridge - June, 1990.

5. Charleswood Bridge Environmental Impact Assessment: Final Report.

6. Written Presentation of The City of Winnipeg "Clean Environment Commission Presentation - Charleswood Bridge Project"

7. Written Presentation of The City of Winnipeg (untitled) containing resumes of the consulting team witnesses.

8. Community Committee Minutes - St. James-Assiniboia Community Committee - October 1, 1974 - page 2.

9. Community Committee Minutes - St. James-Assiniboia Community Committee - September 3, 1974 - page 14.

10. Charleswood Corridor Concept Study: Preliminary Design Study - Technical Report.

11. Written Brief submitted by the Manitoba Environmental Council "Brief to the Clean Environment Commission Public Hearings Regarding the Environmental Impact Assessment for the Charleswood Bridge - July 31, 1991".

12. Archaeological Assessment for the Proposed Charleswood Bridge Project.

13. Motor Vehicle Noise Policies and Guidelines: The City of Winnipeg

14. Report of the Committee on Works and Operations dated September 20, 1988.

15. Letter dated August 23, 1991, together with attachments, from M.S. Samphir, Legal Counsel, City of Winnipeg, to the Clean Environment.

16. Letter dated October 21, 1991, together with attachments, from M.S. Samphir, Legal Counsel, City of Winnipeg, to the Clean Environment Commission.

17. Plan Winnipeg The City of Winnipeg Planning Department, May, 1991.

18. "Alternative Selection Process & County State Act Highway (CSAH) 18". Submitted by Allan Jeffrey & Glen Nicholas.

19. Survey (Data & Signatures). Submitted by Allan Jeffrey & Glen Nicholas

20. "Results of Community Vote - Charleswood Corridor, June 14, 1988" Submitted by Allan Jeffrey & Glen Nicholas, Keep Charleswood Green Committee.

21. "Political Transportation Plan". Submitted by Alan Jeffrey.

22. Written Brief "Presentation to the Public Hearings, Clean Environment Commission, City of Winnipeg - Charleswood Bridge Proposal, July 1991". Submitted by the Keep Charleswood Green Committee

23. Written Brief submitted by Anne Chapman.

24. Charleswood Corridor Concept Study - Preliminary Design Study Summary Report. DS-Lea Consultants Ltd.

25. Curriculum Vita of Richard Patching, P. Eng.

26. Letter dated October 16, 1991, together with diagram, from W.J. McCulloch, P. Eng., Manager, Bridges and Structures Division, Reid Crowther Partners Ltd. to Mr. Ken Rosin, Streets & Transportation Department, City of Winnipeg.

27. Petition "Proposed Charleswood Bridge", together with explanatory notes, dated October 29, 1991. Submitted by Brian McLeod.

28. Written Brief dated October 15, 1991, Submitted by Donna G. Kagan, The Civics Industrial Committee, St. James-Assiniboia Chamber of Commerce Presented by Grant Nordman.

29. Written Brief "Comments on the Charleswood Bridge, Environmental Impact Assessment Final Report - 29 April 1991". Submitted by Don Logan.

30. Written Brief "A Submission to Manitoba Clean Environment Commission Regarding the Charleswood Bridge Project". Submitted by Stuart W.J. Gauld.

31. Written Brief "Charleswood Bridge Environment Committee". Submitted by John Chesin.

32. Written Brief, and supporting documentation (various). Submitted by Ken Emberley.

33. Letter dated February 12, 1988, together with presentation, from W. John Rae, President, Novamet Development Corporation, to William Lyons, City of Winnipeg.

34. Letter dated September 23, 1987, from Ross Mitchell, M.E.S., M.C.I.P., Project Manager, DS-DEA Associates Ltd. to Mr. Doug Henne, Subdivision Administrator, Dept. of Environmental Planning, City of Winnipeg.

35. "Vehicle Count - The City of Winnipeg". Streets and Transportation Department.

36. "Vehicle Count (86) - The City of Winnipeg". Streets and Transportation Department.

37. Graph of 24 Hour Volumes - Portage Ave. Eastbound at Langside St., Sept. 17-25 and Oct. 14-23.

38. Submission to the Clean Environment Commission at the Public Hearing July 30, 1991 on The Environment Act Proposal for the Charleswood Bridge, File No. 3079.00. Manitoba Environment.

39. Submission to the Clean Environment Commission on the Proposed Charleswood Bridge Proposal - October 29, 1991. Submitted by Dan McNaughton, Chief, Environmental Land Use Approvals, Manitoba Environment.

40. Newspaper Articles "Charleswood Corridor Bridge: Blunder or Scandal?" Winnipeg Free Press, February 5, 1991. Klaus Wrogemann, and "Letter to the Editor" (undated). Winnipeg Free Press. Klaus Wrogeman.

41. "Submission on behalf of the COST study group, Consider St. James to EPC meeting, January 17, 1990." Klaus Wrogeman.

42. Letter dated April 16, 1990, and attachments, from Klaus and Dorit Wrogeman to Bryan Blunt, Department of Environment.

43. Brief Presented to Committee of Works and Operations, City of Winnipeg, January 10, 1989, submitted by Mr. E.A. Levin, on behalf of The Cost Study Group of the Birchwood Neighbourhood Association.

44. Video and Video Log submitted by E. Warkentin, on behalf of the COST Study Group.

45. Documentation (various) Index (A) through (W). Submitted by E. Warkentin.

46. Presented to the Civic Affairs Committee of the Winnipeg Chamber of Commerce. October 7, 1991. R.W. Bob Cunningham.

47. Maps associated with Exhibit No. 46. Submitted by R.W. Bob Cunningham.

48. Newspaper Article, The Winnipeg Sun, Tuesday, July 19, 1988. Submitted by Klaus Wrogemann.